

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/266,936 03/12/99 SILENIUS

P 1562.0110000

IM62/1025

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EXAMINER

KRUER, K

ART UNIT	PAPER NUMBER
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1773 *b*

DATE MAILED:

10/25/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/266,936	Applicant(s) Silenius P.
Examiner Kevin Kruer	Group Art Unit 1773

Responsive to communication(s) filed on _____.

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1-17 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-17 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 4, 5

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

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DETAILED ACTION

Content of Specification

- (a) **Title of the Invention:** See 37 CFR 1.72(a). The title of the invention should be placed at the top of the first page of the specification. It should be brief but technically accurate and descriptive, preferably from two to seven words.
- (b) **Cross-References to Related Applications:** See 37 CFR 1.78 and MPEP § 201.11.
- (c) **Statement Regarding Federally Sponsored Research and Development:** See MPEP § 310.
- (d) **Reference to a "Microfiche Appendix":** See 37CFR 1.96(c) and MPEP § 608.05. The total number of microfiche and the total number frames should be specified.
- (e) **Background of the Invention:** The specification should set forth the Background of the Invention in two parts:
 - (1) **Field of the Invention:** A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) **Description of the Related Art:** A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (f) **Brief Summary of the Invention:** A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

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- (g) Brief Description of the Several Views of the Drawing(s): A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. This item may also be titled "Best Mode for Carrying Out the Invention." Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet. (37 CFR 1.52(b)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps.
- (j) Abstract of the Disclosure: A brief narrative of the disclosure as a whole in a single paragraph of 250 words or less on a separate sheet following the claims.
- (k) Drawings: See 37 CFR 1.81, 1.83-1.85, and MPEP § 608.02.
- (l) Sequence Listing: See 37 CFR 1.821-1.825.

Applicant should insert the proper headings into the specification. Furthermore, Applicant needs to insert a description for each drawing.

1. The disclosure is objected to because of the following informalities: claims should not be referred to in the specification since the claims may be amended, canceled or renumbered during prosecution. Pages 1 and 2 have references to a number of claims. Appropriate correction is required.

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Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Finland on March 13, 1998. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

Claim Objections

3. Claims 5-11 16, and 17 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any the multiple dependent claim. See MPEP § 608.01(n). *Accordingly, the claims 5-11, 16, and 17 have not been further treated on the merits.*

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant by "reducing the combustion residue" of a coated paper.

6. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "wood-free" is indefinite. The examiner takes the position that the term has neither been defined clearly in the disclosure nor does the term have an art accepted meaning. Applicant can overcome the rejection by pointing to support for said term in the specification or

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supplying the Office with an art accepted definition of the term supported by a source which predates applicant's priority date.

7. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "wood-containing" is indefinite. The examiner takes the position that the term has neither been defined clearly in the disclosure nor does the term have an art accepted meaning. Applicant can overcome the rejection by pointing to support for said term in the specification or supplying the Office with an art accepted definition of the term supported by a source which predates applicant's priority date.

8. Claims 7 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what physical property the percentage is based upon (ie, weight, volume, etc). Furthermore, it is unclear what the "dry matter" comprises (ie, just the base paper, the base paper and the coating, just the coating, etc.)

9. The term "narrow particle size distribution" in claim 8 is a relative term which renders the claim indefinite. The term "narrow particle size distribution" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. More specifically, it is unclear when a particle size distribution becomes "narrow."

10. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the

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invention. The term “suitable particle size” is indefinite. Specifically, it is unclear when a particle size becomes “suitable.”

11. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim contains an improper Markush group. Specifically, it is unclear whether “kaolin and aluminum hydroxide” is a mixture or two separate fillers which may be used. A similar problem is noted with the species “silica and barium sulphate.” It is also unclear whether applicant wishes to claim a mixture of any of the listed pigments or just mixtures of BaSO₄.

12. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Its unclear upon what physical property the percentage is based (ie, weight?, volume?).

13. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear when a material becomes “essentially” non-combustible.

14. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

15. Claims 3, 4, and 13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant does not explain how the ISO brightness and the opacity are determined.

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Without specifying the test method used to determine such physical characteristics, it is impossible to determine the scope of the claim.

16. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant does not explain how to determine "maximum combustion residue." Furthermore, it is unclear whether "dry matter" comprises just the base paper, the base paper and coating, just the coating, etc.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by SE8904337A (aka Carno). Carno teaches the addition of calcium oxalate to the pulp grist or applied as a coting to paper as part of a pigment. The calcium oxalate has the property of bleaching formed coloured structures and prevents light induced yellowing of paper pulp. The examiner takes the position that the paper taught in Carno inherently reduces wear of paper or cardboard making wire since applicant teaches the mere presence of calcium oxalate results in such a reduction of wear. Similarly, the examiner takes the position that Carno inherently metes the combustion residue limitation of claim 1.

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Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 1-4, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda et al. (Pat. No. 5,92546) in view of SE8904337A (aka Carno). Matsuda teaches a paper and a method of making said paper which comprises a base paper and a coating (abstract). The base paper comprises pulp and filler (col 8, lines 1+). Cellulose and mechanical pulps may be used. The coating comprises a binder and a pigment (abstract). The paper preferably has an opacity of at least 90% (col 10, lines 1-9) and a brightness of at least 82% (col 10, lines 26-37).

Matsuda does not teach the addition of calcium oxalate to the pulp and/or coating of the paper. However, Carno teaches the addition of calcium oxalate to the pulp grist or applied as a coting to paper as part of a pigment. The calcium oxalate has the property of bleaching formed colored structures and prevents light induced yellowing of paper pulp. Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to replace some of the filler/pigment taught in Matsuda with calcium oxalate in order to prevent light induced yellowing of the paper pulp.

With respect to claim 2, the courts have held that a difference in concentrations or temperatures will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. '{W}here the

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general conditions of a claim are disclosed in the prior art it is not inventive to discover the optimum or workable ranges by routine experimentation.' In re Aller , 220, F.2nd 454, 105 USPQ 233, 235 (CCPA 1955). In the current rejection, Carno teaches the addition of calcium oxalate to paper and/or paper coatings reduces light induced yellowing. Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to add calcium oxalate to the paper and/or paper coating in sufficient amounts in order to maximizing the paper's protection against yellowing.

The examiner notes that calcium oxalates are known to render papers fire resistant. Furthermore, such fillers are known to affect the ashing of papers.

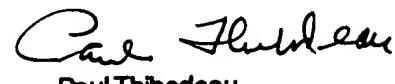
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is (703) 305-0025. The examiner can normally be reached on Monday-Friday from 7:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703)305-5436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0651.


Kevin R. Kruer
Patent Examiner


Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700